

Section IV:

Ensemble Sound

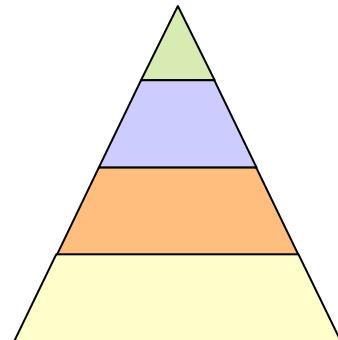
Concepts

Balance and Blend

Great bands are great because they work harder and understand how sound works better than other bands. The exercises and literature we play are part of the working harder portion of the formula. And the musical concepts that each member needs to understand are what this chapter is all about.

The two most important concepts each member needs to understand are Balance and Blend. **Balance** relates to the dynamic level at which each member plays and **Blend** relates to his tone quality.

When a band is properly balanced, each member is making a special, individual contribution to the overall volume of the band's sound. Francis McBeth, a well-respected Arkansas band director and composer, uses what he calls the "double pyramid" model to explain good balance. Pyramids are the most stable structures we know; their wide, triangular bases make this a certainty. Simply, lower-pitched instruments like tubas, bassoons, and baritone saxophones must be heard more than higher-pitched instruments. The higher the pitch of an instrument, the less contribution to the total sound it must make. McBeth calls it a "double" pyramid because the concept applies to both the brass and woodwind families. It also applies somewhat to percussion.



The lowest level of the graphic to the right represents the bass group, like tubas. Because that level takes up the largest amount of space in the pyramid, most of the sound should come from that section. Likewise, the flutes, oboes, 1st clarinets, bells, etc. who play the highest notes at any given time are represented by the tip of the pyramid. And here is where the trouble of balancing most bands happens - there are lots more flutes than tubas in nearly every band out there. In effect, bands that do not play with proper balance are like pyramids standing on their tips - not a very balanced situation!

This means that properly balancing the sound of a band takes constant discipline and attention from each and every player so that their individual sound fits properly within the ensemble sound and that it adheres to the McBeth pyramid. In other words, the 3rd trumpets must be heard more strongly than the 2nd trumpets and the 1st trumpets must be sure they are less powerful than both 2nd and 3rd trumpets. Likewise, the trombones should be more predominant than the trumpets and the horns must be heard more strongly than the clarinets.

Blend simply means that each player within a section has a tone quality that is like all the other players within a section and that each section sounds as much as possible like the other sections. In other words, if all the flute sounds blend into each other and the whole

section's sound blends into the tone qualities of the rest of the band, the whole group's sound will be properly blended. If every member plays with a good characteristic sound for his instrument, this will automatically be accomplished.

So, how does one develop a good characteristic sound? Earlier, it was suggested that each person who plays in band must listen to the great players on his or her instrument to develop a sense of what the instrument should sound like. Not too long ago, that meant spending hard-earned mowing or babysitting money on tapes and CDs of those people playing. No longer, however, does a developing musician have to decide whether to spend his or her money on old instrumental fuddy-duddies or the music of the latest artists. Now, we have Google and YouTube. We can just type in "trumpet artist" and get hundreds of examples to listen to. The only catch is that some of them might actually be examples of what not to do. You must be careful.

Ed Lisk is a New York band director who has spent his entire life finding ways to make bands sound good by using logical methods. He teaches his students to ask three questions while they play and then to adjust their sound according to the answers they give themselves. The three questions are:

1. **Can you hear yourself above all others?** *If so, you are playing too loudly - play more softly so your sound will be balanced with the others.*
2. **Can you still hear yourself above the others?** *If so, your tone quality is poor - adjust your embouchure, breath support, posture, mouthpiece setup, striking position, etc. so your sound will blend with the others.*
3. **Can you still hear yourself above the others?** *If so, you are out of tune - adjust the length (of the horn) or tension (of the drumhead) so you are in tune with all the others. More on this in the next section.*

You can see that question 1 is about balancing your sound to everyone else and question 2 is about blending your tone quality with everyone else. Question 3 is about playing in tune.

While adjusting the length of the horn by pulling or pushing on certain parts or making slight variations in the embouchure or using a drum key to tighten and loosen the head can all be done very easily, it might be a good idea if every band student understood the acoustical concepts behind good intonation. Read the next section for a brief explanation of tuning and also a simple procedure to follow to get you and your instrument to play in tune.

Tuning Basics

Music and sound are very scientific by nature. Understanding some of that science will help you be a better musician. If you know how sound is formed, how it can be manipulated, and what to do to improve your own sound, how could it not make you a better musician?

The science of sound is called "acoustics". The very basic information you need about acoustics is that sound travels in waves, just like ripples in a body of water. The waves of sound would look just like those water waves if they were visible and they would have the same parts. Draw and label the parts of a wave in the space below. Include amplitude, frequency, crest, and trough. Frequency determines the pitch of a tone and amplitude determines volume.

If two waves have exactly the same frequency and amplitude, they will blend and balance perfectly. Imagine two waves that look exactly alike being overlayed onto each other.

Then imagine that one wave has a slightly longer frequency than the other. When they are laid on top of one another, there are places where they "bump into" each other. Those bumps create "beats" in the sound and can be heard when two close pitches are played at the same time. **Try very hard to play without beats when playing with others.**

To get into tune with other instruments, you should always use the following procedure. It may take awhile to get used to going through each of the steps at first, but they will eventually become natural and you will be able to get through the whole process very

quickly. You may also find that some shortcuts may be made after you learn to do the entire set of steps. Here is the procedure:

1. With your instrument near your embouchure, listen carefully to the model tone (from an electronic tuner, piano, mallet instrument, tuba, oboe, etc. - it's best if the tone comes from a piano or tuner or other "fixed pitch" instrument). The pitch we will tune to is usually a concert F, Bb, E, or A, depending on which instrument you play.
2. Hum the pitch quietly to get it inside your head.
3. Play the pitch on your instrument.
4. If you had to tighten your embouchure (or look up on flute), stop playing and lengthen the instrument appropriately (flute at headjoint, clarinet at barrel, sax at mouthpiece, brass at main tuning slide). If you had to loosen your embouchure (or look down), shorten the instrument slightly.
5. After adjusting, listen and hum again. Play the pitch and repeat the process until you have matched the tuning pitch.

Concert F Around the Room

This is a matching drill that has a variety of uses. To the right is "F Around the Room" in its simplest form. First, the whole band plays a tutti F for four counts. Each section, in score order, then plays a four-count F concert. Finally, another tutti F is played.

While playing, students should listen to their own and others' tone quality. Adjustments should be made for blend, balance, and intonation. As one section finishes and another begins, the transition should be seamless. Each four counts should slightly grow into the next.

Obviously, each section will have its own sound, its own tone quality. But during this exercise, students should try to match their tones exactly within sections and strive for as much blending as possible with the other instruments.

This is also a great time to focus on posture, carriage, breathing, articulation, counting. In other words, fundamentals should be the first priority on this seemingly simple exercise.

F Around the Room can be used on other pitches, chords from chorales and pieces the group is working on, rhythmic patterns, dynamics exercises, and just about any other musical element. It's a great exercise to use in sectionals when a group is having trouble blending and balancing a part of the music.

The chart displays ten musical staves, each representing a different instrument or section of a band. The instruments listed vertically on the left are Flute, Bb Clarinet, Oboe, Bassoon, Alto Saxophone, Tenor Saxophone, Baritone Saxophone, Bb Trumpet, Horn, Trombone, Euphonium, Tuba, and Mallets. Each staff consists of a clef, a key signature, and five horizontal lines. The Flute, Bb Clarinet, Oboe, Bassoon, Alto Saxophone, Tenor Saxophone, Baritone Saxophone, Bb Trumpet, Horn, Trombone, Euphonium, and Tuba staves all begin on the second line (middle C). The Mallets staff begins on the fourth line (C). The staves are grouped by a brace under the Mallets staff.

First Five

This is one of the most important exercises in the whole routine. It looks very simple, but it must be done with lots of care and attention. While playing each eight count note, crescendo during the first four counts and decrescendo during the last four. Then, mix it up with patterns of 2 and 6 or 5 and 3. There are lots of possible variations. As you get stronger and softer, though, be sure that the pitch and tone quality remain consistent. Using McBeth's principles for good balance, lower instruments should do a full dynamic change while higher instruments make less and less a change. Experiment.

Tubas: 8va basso

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